

New from

First Births to Older Mothers, 1970–86

STEPHANIE J. VENTURA, AM

The number of first births to women in their thirties has quadrupled in the 16 years, 1970–86.¹ Throughout the 1970s, the increases were largest for women ages 30–34 but, since 1980, the increases in first births and first birth rates have been much larger for women ages 35–39.¹

In 1986, 181,504 women ages 30–34 gave birth to their first child, more than four times the number (42,404) reported in 1970. Although the typical ages of childbearing continue to be 15–29 years, women in their early thirties accounted for 12 percent of all first births in 1986 compared with just 3 percent in 1970. The rise in first birth rates for these women has been nearly as impressive: 17.5 births per 1,000 women ages 30–34 in 1986 compared with 7.3 in 1970. Increases for women 35–39 were also substantial, although the numbers are considerably smaller. The rate for these women increased from 2.1 to 4.7 during this period (Table 1).

These findings are among those included in a recent report from the National Center for Health Statistics (NCHS) which also includes information on demographic patterns such as educational attainment and marital status of the mother and maternal and infant health characteristics.¹ The data are drawn from the live birth certificates of all States and the District of Columbia.

The increases during the early 1970s in first-time childbearing by women in their thirties occurred at the same time that there were steep reductions in higher order birth rates or, to put it another way, a decline in large families for older women. In the five years from 1970 to 1975, rates for fourth and higher order births for women aged 30 years and older fell by about one-half. As a consequence of these declines, which more than offset the slowly increasing first birth rates, the overall birth rate for women in their thirties dropped during the 1970s (Figure 1).

The reversal of these declines beginning in the mid-1970s is associated entirely with the sizable increases in first-birth rates, while higher order rates continued to decline but at a much slower pace. Higher order births comprised only 20 percent of all births to women aged 30 and older in 1986 compared with 55 percent in 1970.

The dramatic increases measured since 1970 in first-time childbearing by women aged 30 and older could have been anticipated because of several important demographic trends. First, there has been the widespread postponement of marriage by young people and the growing rate of dissolution of their marriages.^{2,3} Thus, in 1986, 36 percent of women ages

25–29 years were not married (i.e., never married, widowed, or divorced) compared with 15 percent in 1970.³

A second important change has been the sharp decline and then leveling off in first birth rates for women in their twenties, particularly well-educated women, leaving large numbers and proportions of women still childless at age 30 and older. Between 1970 and 1975, first birth rates for women in their early twenties declined by nearly one-third; among women who were college graduates the rates fell by one-half. Some of this decline was made up for by small increases in birth rates for women ages 25–29. But the rates for women ages 25–29 stabilized by the late 1970s and, for college graduates, the rates have fallen since 1980. Because of these changes, large numbers and proportions of women have reached age 30 without having had any children. One-fourth of women ages 30–34 in 1986 were childless compared with 12 percent of comparably aged women in 1970.

A third important factor is the substantial growth in the number of women ages 25–39, from 18.4 million in 1970 to 30.9 million in 1986, a 68-percent increase.^{4,5} These women, now ages 25–39 years, were all born in the baby boom years following World War II.

Fourth is the fact that national surveys show that most women intend to have at least one child; only about 10 percent of women in their early thirties expect to remain childless.⁶

Because of the interaction of these demographic patterns it was perhaps inevitable that the first birth rates for women in their thirties would surge upward in the late 1970s and 1980s. That is what has happened.

The educational attainment of women who became mothers at relatively older ages has dramatically increased; a larger proportion of these women than of women in any other age group has completed college. Since 1980, close to half of the women in their thirties having their first child were college graduates, compared with one-fourth of comparable women in 1970 (Figure 2). Birth rates specific for educational attainment provide further evidence that the postponement of childbearing and the making up of delayed first births have been primarily confined to well-educated women. For example, the first birth rate for college graduates ages 20–24 fell from 81 in 1970 to 29 in 1985, and for those ages 25–29 the rate fell from 80 to 58. In contrast, the first birth rate for college graduates ages 30–34 rose from 19 to 36 during these years and for women ages 35–39, the rate increased from 5 to 9 per 1,000 women (Table 2).

Greater educational attainment is associated with more timely receipt of prenatal care and a better outcome in terms of birthweight. For example, of first births to college graduates ages 30–34, only 5.8 percent were low birthweight (less than 2,500 grams or 5 pounds 8 ounces) compared with 7.5 percent of all first births to mothers in this age group.¹ In addition to seeking prenatal care very early in pregnancy, well-educated women are much more likely to be well-nourished and to gain

From the Division of Vital Statistics, National Center for Health Statistics. Address reprint requests to Stephanie J. Ventura, AM, Statistician, NCHS, Room 1-44, 3700 East-West Highway, Hyattsville, MD 20782.

Copies of the full report, *Trends and Variations in First Births to Older Women, United States, 1970–86*, Vital and Health Statistics Series 21, No. 47, are available from the U.S. Government Printing Office, Washington, DC 20402. Order stock no. 017-022-01081-0, price is \$1.75.

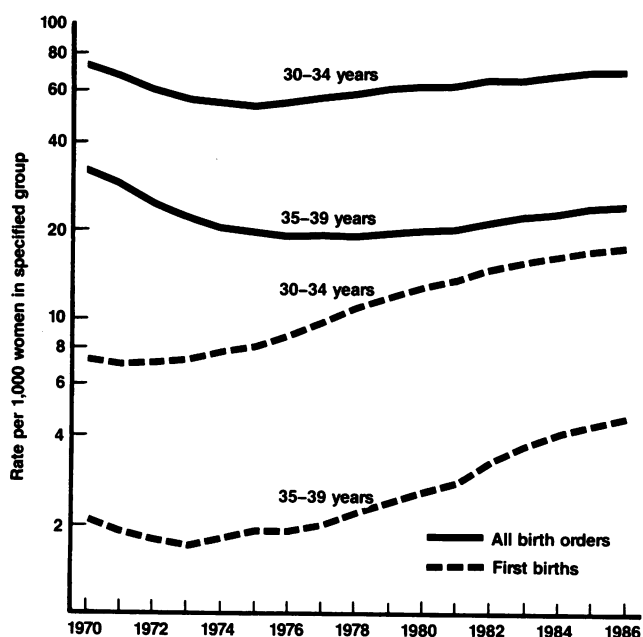
TABLE 1—Number of First Births and First Birth Rates by Age of Mother: United States 1970, 1980, 1985, 1986

Year	Age of Mother (years)						
	15-44 ^a	15-19	20-24	25-29	30-34	35-39	40-44
	Number						
1970	1,430,680	498,388	652,530	212,102	42,404	11,704	2,442
1980	1,545,604	425,676	605,183	371,859	112,964	18,241	1,964
1985	1,554,788	359,272	552,974	418,658	170,686	39,447	3,804
1986	1,553,751	355,233	534,121	424,088	181,504	44,427	4,419
	Rate ^b						
1970	34.2	53.7	78.2	31.2	7.3	2.1	0.4
1980	29.5	41.4	57.3	38.2	12.8	2.6	0.3
1985	27.6	39.7	53.0	38.8	16.9	4.4	0.5
1986	27.2	39.1	52.7	38.8	17.5	4.7	0.6

^aNumbers include births to women under age 15 years and ages 45-49 years which are not shown separately. Rates computed by relating first births regardless of age of mother, to women aged 15-44 years.

^bFirst births per 1,000 women in specified group.

SOURCE: Reference 1, Tables 1 and 2.



SOURCE: Reference 1, tables 2 and 4

FIGURE 1—Birth Rates for Women Ages 30-34 and 35-39 Years, All Births and First Births, United States, 1970-86

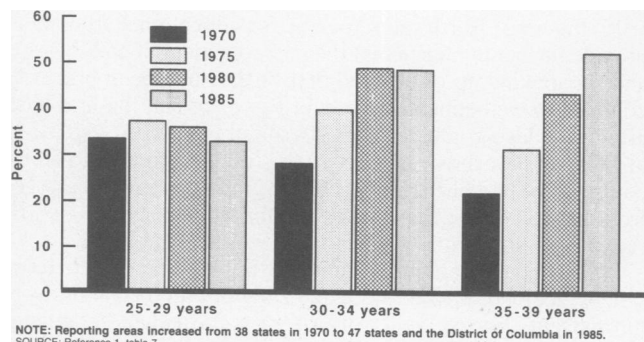


FIGURE 2—Percent of Women Having Their First Child Who Are College Graduates, by age

NOTE: Reporting areas increased from 38 states in 1970 to 47 states and the District of Columbia in 1985.

SOURCE: Reference 1, Table 7

TABLE 2—First Birth Rates for Women Who are College Graduates, by Age of Mother: United States 1970, 1975, 1980, 1985

Year	Age of Mother (years)			
	20-24	25-29	30-34	35-39
1970	81.1	80.3	19.1	5.0
1975	40.1	64.4	20.1	4.8
1980	39.7	65.8	29.8	6.6
1985	28.9	58.1	35.6	9.4

(Rates are first births per 1,000 women in specified age and educational attainment group)

Source: Reference 1, Table 8.

adequate weight during pregnancy as well as to curtail behaviors such as smoking which could affect pregnancy outcome.⁷⁻⁹

In recent years the number of babies born in the United States has been increasing because the number of women in the childbearing ages has risen. Birth rates by age of mother, however, have risen only for relatively older women.¹⁰ The fact that a growing fraction of women giving birth for the first time are 30 years old or older may have implications for health care providers. For example, cesarean deliveries are more likely for older mothers.¹¹ Older mothers are at greater risk for certain complications,* and their babies are at higher risk of being of low birthweight and of having certain congenital anomalies.^{10,12} Additionally, the much greater labor force participation rate of these older mothers may have implications in terms of child care needs. About two-thirds of first-time mothers ages 30-44 were in the labor force in June 1986 compared with half of women having their first child at ages under 25 years.⁶ The data in this report can provide a basis for decisions on these medical, health, and child care issues.

REFERENCES

1. Ventura SJ: Trends and variations in first births to older women, 1970-86. National Center for Health Statistics. Vital Health Stat 21(47). 1989.
2. National Center for Health Statistics: Advance report of final marriage statistics, 1986. Monthly vital statistics report; vol 38 no. 3, supp. 2.

*Kessel S, Hutchins V, Placek P, Liss T: Trend in underlying medical conditions, complications of pregnancy, and complications of labor to mothers of in-wedlock live hospital births: United States, 1972 and 1980. Paper presented at the annual meeting of the Southern Regional Demographic Group, Oct 17-19, Orlando. 1984.

- Hyattsville, MD: Public Health Service, NCHS, 1989.
3. US Bureau of the Census: Marital status and living arrangements, March 1986. Current population reports; series P-20, no 418. Washington, DC: US Department of Commerce, 1986.
 4. US Bureau of the Census: Preliminary estimates of the population of the United States, by age, sex, and race: 1970 to 1981. Current population reports; series P-25, no 917. Washington, DC: US Department of Commerce, 1982.
 5. US Bureau of the Census: Estimates of the population of the United States, by age, sex, and race, 1980 to 1987. Current population reports; series P-25, no 1022. Washington, DC: US Department of Commerce, 1988.
 6. US Bureau of the Census: Fertility of American women: June 1986. Current population reports; series P-20, no 421. Washington, DC: US Department of Commerce, 1987.
 7. Taffel S: Maternal weight gain and the outcome of pregnancy, United States, 1980. Vital Health Stat 21(44). Hyattsville, MD: National Center for Health Statistics, 1986.
 8. Prager K, Malin H, Spiegler D, Van Natta P, Placek P: Smoking and drinking behavior before and during pregnancy of married mothers of live-born infants and stillborn infants. Public Health Rep 1984; 999(2):117-127.
 9. Mosher W, Pratt W: Fecundity, infertility, and reproductive health in the United States, 1982. Vital Health Stat 23(14). Hyattsville, MD: National Center for Health Statistics, 1987.
 10. National Center for Health Statistics: Advance report of final natality statistics, 1986. Monthly vital statistics report; vol 37, no 3 supp. Hyattsville, MD: NCHS, Public Health Service, 1988.
 11. Placek PJ, Taffel SM: Recent patterns in cesarean delivery in the United States. In: Plauche WC (ed): Obstetrics and Gynecology Clinics of North America. Philadelphia: W.B. Saunders, 1988; 607-627.
 12. Taffel S: Congenital anomalies and birth injuries among live births: United States, 1973-74. Vital Health Stat 21(31). Hyattsville, MD: National Center for Health Statistics, 1978.

Errata

An error in the printing of Appendix Table 2 was recently found in the article by Sempos, *et al*, in the November 1988 Journal.¹ For 1979, the sum of the age-adjusted mortality rates of Ischemic Heart Disease and Hypertensive Heart Disease for black females should be 129.1. Also for 1979, the sum of the age-adjusted mortality rates of Ischemic Heart Disease, Hypertensive Heart Disease, and Cardiovascular Disease Unspecified for white males, white females, black males, and black females should be 244.9, 111.2, 254.2, and 151.0, respectively.

Also, the SOURCE should read: "Prepared by authors using data from the NCHS, Division of Vital Statistics." The editorial staff of the Journal regrets this error.

REFERENCE

1. Sempos C, Cooper R, Kovar MG, McMillen M: Divergence of the recent trends in coronary mortality for the four major race-sex groups in the United States. Am J Public Health 1988; 78(11):1422-1427.

* * *

In the paper by Lurie, *et al*,¹ May 1989 issue of this Journal, there is an error in the Table 2.

In column three, headed "Diff. (95% CI)," under the main heading of "Free", the % with natural impairment having an eye examination should read (3, 13) rather than (3, 3) as appeared in the published version. The authors regret that this error was not caught in the galleys.

REFERENCE

1. Lurie N, Kamberg CJ, Brook RH, Keeler EB, Newhouse JP: How free care improved vision in the health insurance experiment. Am J Public Health 1989; 79(5):640-2.

* * *

Concerning the letter to the Editor *Comments Received on Walker's 'Odd Man Out' Approach* published in the June 1989 issue of the *American Journal of Public Health* (Vol. 79, No. 6, p 781): The first sentence in the last paragraph should have read "It is not our aim . . ." rather than "It is our aim. . . ." Although it was felt that most readers can tell from the tone of the paragraph that the authors of the letter were not trying to detract from the Walker, *et al*, paper, they nonetheless requested that the Journal notify the readers of this error and express their regret over its occurrence.